

Burlingame, M. J., A. M. Fouda and R. D. Hart. “Modeling of Landfill Stability with Vertical Barrier Walls: A Practical Example Using Limit Equilibrium and Numerical Methods,” in *Geotechnical Engineering in the Information Technology Age (Proceedings of Geocongress 2006, February-March 2006, Atlanta)*, CD Proceedings, ISBN 0-7844-0803-3. D. J. DeGroot et al., Eds. Reston, Virginia: ASCE, 2006.

Han, Y., and R. Hart. “Application of a Simple Hysteretic Damping Formulation in Dynamic Continuum Simulations,” in *Numerical Modeling in Geomechanics — 2006 (CD Proceedings of the 4th International Symposium, Madrid, May 2006)*, Paper No. 04-02. R. Hart and P. Varona, Eds. Minneapolis, Minnesota: Itasca Consulting Group, Inc., 2006.

Varona, P., and R. Hart, Eds. *FLAC and Numerical Modeling in Geomechanics - 2006 (Proceedings of the 4th International FLAC Symposium, May 2006, Madrid)*. Minneapolis, Minnesota: Itasca Consulting Group, Inc., 2006.

Gil, I., J. C. Roegiers, R. Hart and Y. Shimizu. “Modeling the Mechanical Properties of Antler Sandstone Using a Discrete Element Model,” in *Proceedings of Alaska Rocks 2005 — Rock Mechanics for Energy, Mineral and Infrastructure Development in the Northern Regions (CD)*. University of Alaska-Anchorage, June 2005, Paper No. ARMA/USRMS 05-717. G. Chen et al., Eds. ARMA, University of Alaska-Fairbanks, 2005.

Hart, R. D., and C. Detournay. “Geotechnical Constitutive Models in an Explicit, Dynamic Solution Scheme,” in *Soil Constitutive Models: Evaluation, Selection and Calibration (Proceedings of Geo-Frontiers 2005, Austin, Texas, January 2005)*, ASCE Geotechnical Special Publication No. 128, pp. 185-203. J. A. Yamamuro and V. N. Kaliakin, Eds. Reston, Virginia: ASCE, 2005.

Shimizu, Y., R. D. Hart and P. Cundall, Eds. (2004) *Numerical Modeling in Micromechanics Via Particle Methods — 2004 (Proceedings of the 2nd International PFC Symposium, Kyoto, Japan, October 2004)*. Leiden: Balkema.

Cundall, P., C. Carranza-Torres and R. Hart. “A New Constitutive Model Based on the Hoek-Brown Criterion,” in *FLAC and Numerical Modeling in Geomechanics — 2003 (Proceedings of the 3rd International FLAC Symposium, Sudbury, Ontario, Canada, October 2003)*, pp. 17-25. R. Brummer et al., Eds. Lisse: Balkema, 2003.

Brummer, R., P. Andrieux, C. Detournay and R. Hart, Eds. *FLAC and Numerical Modeling in Geomechanics — 2003 (Proceedings of the 3rd International FLAC Symposium, Sudbury, Ontario, Canada, October 2003)*. Lisse: Balkema, 2003.

Hart, R. (2003) “Enhancing Rock Stress Understanding Through Numerical Analysis,” *Int. J. Rock Mech. & Min. Sci.*, **40**, 1089-1097.

Damjanac, B., T. Siegel and R. Hart. “Seismic Analysis of a Pile-Supported Wharf in Charleston, South Carolina,” presented at Down to Earth Technology (the International Deep Foundations Congress, Orlando), February 2002.

Billiaux, D., X. Rachez, C. Detournay and R. Hart, Eds. *FLAC and Numerical Modeling in Geomechanics — 2001 (Proceedings of the 2nd International FLAC Conference, Lyon, France, October 2001)*. Lisse: Balkema, 2001.

Hart, R. D. "Pile-Supported Foamed Concrete Highway Embankment," presented at the 33rd Annual Southeastern Transportation Geotechnical Engineering Conference, Roanoke, Virginia, October 2001.

Fairhurst, C., B. Damjanac and R. Hart. "Numerical Analysis As a Practical Design Tool in Geo Engineering," in *Slope Stability 2000*, Geotechnical Special Publication No. 101, Proceedings of Sessions of Geo-Denver 2000 (August 2000, Denver), pp. 169-183. D. V. Griffiths, Eds. Reston, Virginia: ASCE, 2000.

Hart, R., and C. Fairhurst. "Application of Discontinuum Modeling in Geotechnical Studies for Nuclear Waste Isolation," in *Geocology and Computers (Proceedings of the 3rd International Conference on Advances of Computer Methods in Geotechnical and Geoenvironmental Engineering (Moscow, February 2000))*, pp. 15-28. S. A. Yufin, Ed. Rotterdam: Balkema, 2000.

Detournay, C., and R. Hart, Eds. *FLAC and Numerical Modeling in Geomechanics (Proceedings of the Conference, Minneapolis, September 1999)*. Rotterdam: Balkema, 1999.

Konietzky, H., R. Hart and D. Billaux. "Mathematische Modellierung von geklüftetem Fels," *Felsbau*, **12**(6), 395-400 (1994).

Coetzee, M J., R. H. Hart, P. V. Varona and P. A. Cundall. *FLAC Basics: An Introduction to FLAC and a Guide to Its Practical Application in Geotechnical Engineering*. Minneapolis, Minnesota: Itasca Consulting Group, Inc., 1993.

Cundall, P. A., and R. D. Hart. "Numerical Modeling of Discontinua," *Engr. Comp.*, **9**, 101-113 (1992); in *Comprehensive Rock Engineering*, Vol. 2, pp. 231-243. J. A. Hudson, Ed. Oxford: Pergamon Press, 1993.

Hart, R. D. "An Introduction to Distinct Element Modelling for Rock Engineering," in *Proceedings of the 7th International Congress on Rock Mechanics (Aachen, Germany, September 1993)*, Vol. 3, pp. 1881-1892. W. Wittke, Ed. Rotterdam: Balkema, 1993; in *Comprehensive Rock Engineering*, Vol. 2, pp. 245-261. J. A. Hudson, Editor-in-Chief. Oxford: Pergamon Press, 1993.

Lorig, L. J., and R. D. Hart. "Block Dynamics Modeling in Support of Seismic Design," in *Dynamic Analysis and Design Considerations for High-Level Nuclear Waste Repositories (Proceedings of the Symposium, San Francisco, August 1992)*, pp. 228-242. Q. A. Hossain, Ed. New York: ASCE, 1993.

Hart, R. D., and P. A. Cundall. "Microcomputer Programs for Explicit Numerical Analysis in Geotechnical Engineering (in Russian)," *Engr. for Energy J.* (Proceedings of the International Seminar on Numerical Methods in Geomechanics), **7**, 9-13 (July 1992).

Yufin, S. A., R. D. Hart and P. A. Cundall. "Comparative Analysis of Recent Numerical Methods in Geomechanics (in Russian)," *Engr. for Energy J.* (Proceedings of the International Seminar on Numerical Methods in Geomechanics), **7**, 4-8 (July 1992).

Ahola, M. P., S. M. Hsiung, A. H. Chowdhury, D. D. Kana and R. Hart. "Experimental Determination of Properties of Natural Rock Joints in a Welded Tuff," presented at the ASME 1991 Summer Applied Mechanics Meeting (Ohio State University, June 1991).

Lorig, L. J., R. D. Hart and P. A. Cundall. "Slope Stability Analysis of Jointed Rock Using the Distinct Element Method," *Transportation Research Record, Soils, Geology and Foundations (Behavior of Jointed Rock Masses and Reinforced Soil Structures)*, **1330**, 1-9 (1991).

Hart, R. D. "Discontinuum Analysis for Deep Excavations in Jointed Rock," in *Rock at Great Depth*, Vol. 3, pp. 1123-1130. Rotterdam: Balkema, 1990.

Hart, R., D. Hanson and D. Swan. "A Three-Dimensional Ground Control Program for Falconbridge Limited," *92nd Annual General Meeting of CIM C 1990*, Paper No. 89. Ottawa: CIMM, May 1990.

Roest, J.P.A., R. D. Hart and L. J. Lorig. "Modelling Fault-Slip in Underground Mining with the Distinct Element Method," in *Proceedings of the 6th International IAEG Congress (Amsterdam, August 1990)*, pp. 105-110. Rotterdam: Balkema, 1990.

Cundall, P. A., and R. D. Hart. "Numerical Modeling of Discontinua," Keynote Address, in *Proceedings of the 1st U.S. Conference on Discrete Element Methods (Golden, Colorado, October 1989)*, pp. 1-17. G.G.W. Mustoe, M. Henriksen and H-P. Huttelmaier, Eds. Golden, Colorado: CSM Press, 1989;

Lorig, L. J., R. D. Hart, M. P. Board and G. Swan. "Influence of Discontinuity Orientations and Strength on Caveability in a Confined Environment," in *Rock Mechanics as a Guide for Efficient Utilization of Natural Resources*, pp. 167-174. A. Wahab Khair, Ed. Rotterdam: Balkema, 1989.

Christianson, M. C., R. D. Hart and J. F. Schatz. "Numerical Analysis of Multiple Radial Fracturing," in *Key Questions in Rock Mechanics*, pp. 441-452. Rotterdam: Balkema, 1988.

Hart, R. D., and J. V. Lemos. "Numerical Analysis of Explosion-Induced Fault Motion," presented at the 29th U.S. Rock Mechanics Symposium, 1988.

Hart, R., P. Cundall and J. Lemos. "Formulation of a Three-Dimensional Distinct Element Model C Part II: Mechanical Calculations for Motion and Interaction of a System Composed of Many Polyhedral Blocks," *Int. J. Rock Mech., Min. Sci. & Geomech. Abstr.*, **25**, 117-126 (1988).

Hart, R. D., M. Board, B. Brady, B. O'Hearn and G. Allan. "Examination of Fault-Slip Induced Rockbursting at the Strathcona Mine," in *Key Questions in Rock Mechanics*, pp. 369-379. Rotterdam: Balkema, 1988.

O'Hearn, B., D. Morrison, G. Allan, M. Board and R. Hart. "Use of Numerical Modeling in Mine Design at Falconbridge, Ltd.," presented at the SME Annual Meeting (Phoenix, January 1988), Geomechanics, Session II.

Fairhurst, C., and R. D. Hart. "Verification and Validation of Coupled Mechanical/Water Flow Effects in Rock Masses: Some Possibilities and Limitations," in *GEOVAL-87 (Stockholm, April 1987)*, pp. 527-545. Stockholm: SKI, 1987.

Lemos, J., R. Hart and L. Lorig. "Dynamic Analysis of Discontinua Using the Distinct Element Method," in *Proceedings of the Sixth International Congress on Rock Mechanics (Montreal, 1987)*, Vol. 2, pp. 1079-1084. Rotterdam: Balkema and the Canadian Rock Mechanics Association/CIM/CGS, 1987.

Hart, R. D., and C. M. St. John. "Formulation of a Fully-Coupled Thermal-Mechanical-Fluid Flow Model for Non-Linear Geologic Systems," *Int. J. Rock Mech., Min. Sci. & Geomech. Abstr.*, **23**(3), 213-224 (1986).

Brady, B.H.G., M. L. Cramer and R. D. Hart. "Preliminary Analysis of a Loading Test on a Large Basalt Block," *Int. J. Rock Mech.*, **22**(5), 345-348 (1985).

Hart, R. D., P. A. Cundall and M. L. Cramer. "Analysis of a Loading Test on a Large Basalt Block," in *Research and Engineering C Applications in Rock Masses*, Vol. 2, pp. 759-768. E. Ashworth, Ed. Boston: Balkema, 1985.

Lemos, J. V., R. D. Hart and P. A. Cundall. "A Generalized Distinct Element Program for Modelling Jointed Rock Mass: A Keynote Lecture," in *Proceedings of the International Symposium on Fundamentals of Rock Joints (Bjorkliden, September 1985)*, pp. 335-343. Luleå, Sweden: Centek, 1985.

Hart, R. D. "Application of Explicit Finite Difference Methods to Modeling Coupled Thermal-Mechanical-Hydraulic Behavior in Geologic Media," in *Implementation of Computer Procedures and Stress-Strain Laws in Geotechnical Engineering*, pp. 431-445. C. S. Desai and S. K. Saxena, Eds. Durham, N.C.: Acorn Press, 1981.

Hart, R. D. "Geotechnical Modeling of a Cut and Fill Mining Operation," in *Application of Rock Mechanics to Cut and Fill Mining*, Vol. II, pp. 307-315. O. Stephansson and M. J. Jones, Eds. London: IMM, 1981.

Hart, R., and C. M. St. John. "A Fully-Coupled Thermal-Hydraulic-Mechanical Model for Non- Linear Geologic Systems," in *Rock Mechanics From Research to Application*, pp. 90-96. Cambridge: M.I.T., 1981.